

IN THE SPECIFICATION:

Please amend paragraphs [006], [014]-[018], [021], [022], [028], [030], [032], [035]-[039], [042]-[044], [049]-[052], [056], [057], [059], [064], [066], [069], [070] of the specification as shown below, in which deleted terms are shown with strikethrough and added terms are shown with underscoring.

Paragraph [006]

Here, the adjustment of the length of the seatbelt is managed based on the emergency lock mode, when ~~the~~ collision with another vehicle occurs and the seatbelt is pulled at a speed of more than a threshold speed. That is, this emergency lock mode is performed in order to protect the occupant against injury by holding the occupant by the seatbelt.

Paragraph [014]

SUMMARY OF THE INVENTION

The present invention relates to an attaching structure for a seatbelt apparatus of a vehicle equipped with a seat, which is supported by a vehicle body through a weight sensor. In this invention, a seatbelt-anchor is fixed to a member, which is positioned ~~near~~ nearer to the seat than the weight sensor.

Paragraph [015]

In the present invention having these constructions, the seatbelt-anchor is fixed to a member that is positioned ~~near~~ nearer to the seat than the weight sensor. Thereby, the load caused by the mounting of the child seat is not applied to the weight sensor. Thus, the weight of an occupant sitting on the seat is accurately measured.

Paragraph [016]

In the present invention, it is preferable that a buckle, which is engaged with/disengaged from a tang of the seatbelt apparatus, is fixed to a member ~~positioning~~ positioned ~~near~~ nearer to

the seat than the weight sensor.

Paragraph [017]

That is, the buckle, which fixes the seatbelt at the other side of the seat with respect to the seatbelt-anchor, is fixed to the member that is ~~positioning~~ positioned ~~near~~ nearer to the seat than the weight sensor. Thereby, since the unfavorable load is not applied to the weight sensor, the weight sensor can measure the weight of the occupant more accurately.

Paragraph [018]

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view ~~which looked~~ looking at ~~the~~ a seatbelt apparatus from an upper rear direction.

Paragraph [021]

FIG. 4 is a cross-sectional view of ~~the~~ a weight detection unit.

Paragraph [022]

FIG. 5 is an exploded perspective view of ~~the~~ an attaching structure between the seatbelt-anchor and the base plate according to the invention.

Paragraph [028]

The rear of the backrest of ~~the~~ a child seat 11 is provided with belt insertion-holes 12 and 12, which are formed at both sides in the width directions of the child seat 11. When the tang 9, the lap belt 5, and the shoulder belt 7 are passed through the belt insertion-holes 12 and 12 and the tang 9 is connected to the buckle 10, the child seat 11 is stably placed on the seat 1.

Paragraph [030]

The emergency lock mode is used in order to hold the occupant on the seat 1 by the seatbelt apparatus 2. In this emergency lock mode, generally, the pull-out and take-up of the

shoulder belt 7 from the retractor 6 is allowed in order to permit the change of the sitting posture of the occupant. In this emergency lock mode, on the other hand, the pull-out or take-up of the shoulder belt 7 is forbidden in the event of ~~the~~ a side collision with another vehicle. In other words, the adjustment of the length of the shoulder belt 7 is allowed in the usual state, but the adjustment of the length of the shoulder belt 7 is not allowed when the shoulder belt 7 is pulled at a speed of greater than a threshold value.

Paragraph [032]

In this auto lock mode, the take-up of the shoulder belt 7 is allowed and the pull-out of the shoulder belt 7 is forbidden. Thereby, the child seat 11 is firmly fixed at the seat 1. In other words, the shortening of the length of the shoulder belt 7 is allowed in the usual state, but the lengthening of the length of the shoulder belt 7 is not allowed in order to fix the child seat 11 to the seat 1 firmly.

Paragraph [035]

Plates 15 and 15 that constitute the frame of the seat part of the seat 1 are provided at ~~the~~ both sides along the fore-and-rear directions with respect to the seat 1. Each of the plates 15 is connected to each of movable sliders 32 of ~~the~~ a slidable mechanism 30.

Paragraph [036]

~~The~~ A rail 31, which is a stationary member of the slidable mechanism 30, is fixed on the weight detection unit 20. The weight detection unit 20 is fixed to ~~the~~ a pair of seat-fixing brackets 16. The seat 1 is fixed to the vehicle body by connecting ~~the~~ each of the seat-fixing brackets 16 to the floor F. In other words, the seat 1 is supported by the floor F, through the slidable mechanism 30, the weight detection unit 20, and the seat-fixing brackets 16. Here, the rear-side end of each seat-fixing bracket 16 is connected to the floor F through ~~the~~ a sub-bracket 17 (FIG. 3).

Paragraph [037]

As shown in FIG. 4, the weight detection unit 20 is composed of a base plate 21 connected to the seat 1 through the slidable mechanism 30, a bracket 22 acts as a load acceptor, an arm 23 acts as a load transmitter, and a sensor ~~bracket~~ plate 24 acts as a load detector. Here, FIG. 4 shows the state wherein the arm 23 and the sensor ~~bracket~~ plate 24 are deformed in compliance with a load ~~to be~~ applied to the seat 1.

Paragraph [038]

The base plate 21 is a long member, which is a U-like shaped member in sectional viewing. In other words, the base plate 21 is formed by bending ~~the~~ both ends in the width direction of the rectangular plate so that ~~the~~ a depression part is formed inside thereof. Here, this ~~bend~~ bent end part is defined as side-part.

Paragraph [039]

The base plate 21 accommodates the bracket 22, the arm 23, and the sensor ~~bracket~~ plate 24 in the depression part, and hence the base plate functions as an accommodator.

Paragraph [040]

A long-hole 21a and a pin-hole 21b are formed at ~~the~~ both side-parts of the base plate 21. A bracket pin 25, which connects the arm 23 with the bracket 22, is inserted into the long-hole 21a, and a center pin 26, which serves as a rotation axis of the arm 23, is inserted into the pin-hole 21b.

Paragraph [042]

The arm 23 has side-wall at the end part in the longitudinal directions of the arm 23. A bracket-hole 23a, through which the bracket pin 25 is inserted, and a pin-hole 23b, through which the center pin 26 is inserted, are provided on the side-wall. A notched part is formed on the other end part of the arm 23 so that a pair of convection parts 23c is formed at the sensor plate 24 side of the arm 23.

Paragraph [043]

The sensor plate 24 has a pair of a displacement parts 24b at ~~the~~ both sides of a fixing part 24a. The displacement part 24b and the fixing part 24a ~~is~~are connected through a path 24c, which has a smaller width and thickness than both of the displacement part 24b and the fixing part 24a. Here, in FIG. 4, only one side of the sensor plate 24 is indicated.

Paragraph [044]

Each path 24c has two strain gages (not shown) thereon. The position where the strain gages are provided is the vicinity of the displacement part 24b and the vicinity of the fixing part 24a. Here, each of strain gages is joined by electric wiring so that ~~the~~ a bridge circuit is provided.

Paragraph [049]

In the present embodiment, it is preferable that the bridge circuit has a thermistor ~~25~~ (not shown) at the position between the strain gages that are placed on the path 24c.

Paragraph [050]

~~The~~ A control unit (not shown) that controls the sensor plate 24 is equipped with ~~the~~ a CPU and ROM, and is fixed at the seat-fixing bracket 16. The control unit supplies an electric current to the bridge circuits of the weight detection unit 20, and measures the electric current that is supplied from the weight detection unit 20 after passing through the bridge circuit.

Paragraph [051]

Then, the control unit computes the variations of the resistance value of the strain gage based on the electric current supplied to the bridge circuit and the electric current supplied from the bridge circuit. Next, the control unit generates the output signal based on the result of the computing. The output signal is supplied to respective control units, such as a control unit of an airbag apparatus or a control unit of an indicator on the instrument panel.

Paragraph [052]

As shown in FIG. 2 and FIG. 4, when arranging the weight detection unit 20 to the seat 1, the bracket 22 is positioned at a lower-side and the base plate 21 is positioned at ~~the~~ an upper-side. Then, the bracket 22 is connected to the seat-fixing bracket 16 and the base plate 21 is connected to the rail 31.

Paragraph [056]

In the present embodiment, as described above, the seatbelt-anchor 4 and the buckle 10 are fixed to the members, which are ~~positioning at~~ positioned nearer to the seat 1 side than the weight detection unit 20. To be more precise, the seatbelt-anchor 4 and the buckle 10 are fixed to the members that do not affect ~~on~~ the weight detection sensor (the sensor plate 24 and the arm 23) of the weight detection unit 20.

Paragraph [057]

In the present invention, the undesirable load caused by the tensile force (the belt tension) of the lap belt 5 is not added to the weight detection unit 20 (the weight detection sensor), as long as the seatbelt-anchor 4 and the buckle 10 are fixed to the members, which are ~~positioning~~ positioned at the seat 1 side with respect to the weight detection unit 20 (the sensor plate 24 and the arm 23).

Paragraph [059]

In the present invention, still furthermore, the detection error of the weight of the occupant measured by the weight detection unit 20 can be minimized, as long as the seatbelt-anchor 4 is fixed to the members that are ~~positioning near~~ positioned nearer to the seat 1 than the sensor plate 24 and the arm 23, even if the buckle 10 is fixed at the floor of the vehicle.

Paragraph [064]

In the present embodiment, the seatbelt-anchor 4 is fixed to the anchor mounter 33, by inserting and screwing the bolt 39 in order of: a washer 37, the bolt-hole 4a, a spacer 36, and the

screw-hole 33d, after arranging ~~each~~ these parts in order of: the anchor mounter 33, a spacer 36, the seatbelt-anchor 4, and a washer 37.

Paragraph [069]

Although there ~~have~~ has been disclosed what ~~are~~ is the ~~patent~~ present embodiment of the invention, it will be understood by persons skilled in the art that variations and modifications may be made thereto without departing from the scope of the invention, which is indicated by the appended claims.

Paragraph [070]

In the present invention, the seatbelt-anchor 4 may be fixed to any position as long as the seatbelt-anchor 4 is fixed to the members, which are ~~positioning near~~ positioned nearer to the seat 1 than the weight detection unit 20. For example, the seatbelt-anchor 4 may be attached to the frame member of the seat 1 when the weight detection unit 20 is arranged in the condition that the weight detection unit 20 is upside down with respect to the arranging manner that is shown in FIG. 3.